

七宝焼 *Shippo-yaki* Cloisonné Works



A cloisonné is a piece created with a technique to decorate metalwork made from gold, silver, copper etc. The metal basis is colored with fine glassy powder, and then heated in a kiln for the glaze to fix. In Japanese such technique as well as the pieces created using it is called “*Shippo-yaki*.” The word *Shippo* originally came from Buddhist terms meaning “seven precious things”, namely, gold, silver, lapis



Shaping a metal basis



Decorating with glazing

lazuli, shells of giant clams (*shako*), agate, pearls and *iye* (a kind of agate produced in China). The name *Shippo-yaki* was given as the cloisonné piece so created was thought to be as beautiful as the *Shippo*.

The technique was originally invented in the region around Middle East, and cloisonné pieces are

found from excavated ancient Egyptian ruins: it is believed to have been brought to Japan between 3rd and 7th centuries via China. In 19th century, numerous craftworks and decorative articles of definite Japanese style were produced using this technique.

The glazing used in *Shippo-yaki* is mainly composed of SiO_2 , Pb_3O_4 , KNO_3 , Na_2CO_3 , etc, and transition metal compounds such as cobalt oxide, iron oxides, and manganese dioxide are added. Heated up to temperature of around 800 °C on the metallic base, the glazing melts to show glassy color, depending on which kinds of metals are contained (e.g., red for gold, blue for copper oxide, indigo for cobalt oxide, purple for manganese dioxide, and brown for iron oxide). A *Shippo-yaki* piece is completed by painting elaborate patterns and motifs on the base with various glazing and fusing in kilns.

Because the process is relatively simple, some handicraft shops and *Shippo-yaki* shops in Japan offer cloisonné-making experience programs. If you come across one of those, why don't you give it a try?

Blu-ray

Blu-ray disc is an optical disc storage that uses blue-violet laser to write and rewrite data on the disc. While in case of CD and DVD red laser that has a wavelength of 650 nm is used, the blue violet laser used for Blu-ray has a wavelength of 405 nm; this makes it possible to reduce the radius of beam spot, allowing significantly more data to be stored on a single disc compared to DVDs: the capacity is as high as 25 GB per single-layer disc and 50 GB per dual layered disc. This made it possible not only to enjoy a full high definition movie at home, but also to add interactive functions, and even connection to internet. Usage as completely new types of media is still actively sought for. The blu-ray may hold enormous potentialities to provide brand new visual experience, improving and innovating existing ways of entertainment.

